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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,786	08/16/2006	Akio Furuse	NAA244	9653

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EXAMINER	
GISSEL, GUNNAR J	

ART UNIT	PAPER NUMBER
2856	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,786	FURUSE, AKIO	
	Examiner	Art Unit	
	Gunnar J. Gissel	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *8/16/2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/16/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,513,366 to Anton Stauffer (Stauffer) with teaching from US Patent 5,285,678 to Gale McDaniel et al (McDaniel).

Regarding Claim 1, 3 and 4, Stuaffer discloses a string-like seal member for use with a leakage testing apparatus, which is formed of elastic material (Stauffer, figure 2, seal member 44) but does not explicitly disclose that the string like member has a rounded rectangular shape and that the rectangular shape in cross-section does not exceed two twice the length of the minor axis and the length of said major axis of the rounded-comer rectangular shape in cross-section is set at 1.2-1.5 t-fines the length of the minor axis.

McDaniel discloses a package having a rounded-comer rectangular shape in cross-section having a major axis, a minor axis extending perpendicularly to the major axis and shorter than the major axis, major sides equal to the length of the major axis, and minor sides equal to the length of the minor axis, with the edges at four comers arcuately removed therefrom to form a rounded-comer rectangular shape (McDaniel, figure 1). McDaniel further discloses that the length of said major axis of the rounded-

comer rectangular shape in cross-section does not exceed two twice the length of the minor axis (McDaniel, figure 1). McDaniel also discloses that the length of said major axis of the rounded-comer rectangular shape in cross-section is set at 1.2-1.5 t-fines the length of the minor axis (McDaniel, figure 1).

It would have been obvious to one of ordinary skill to combine Stauffer with teachings from McDaniel, because Stauffer's leak testing device tests packages, such as McDaniel's for leaks, and has a shape that conforms to shape of container being tested (column 3, lines 1-5).

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stauffer with teachings from McDaniel as applied to claim 1 above, and further in view of a 1997 BMW 8-series intake manifold gasket (BMW).

2. The string-like seal member for use with a leakage testing apparatus set forth in claim 1, wherein said minor sides of the rounded-comer rectangular shape in cross-section are formed in a semi-circular arc with a radius of curvature half the length of the minor axis (BMW).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Stauffer as modified by McDaniels with teaching from BMW because it is generally known to those who deal with gaskets and seals that a gasket or seal's shape conforms to the shape of the opening being sealed.

4. Claims 5, 6, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stauffer as modified by McDaniel as applied to claim 1 above, and further in view of US Patent 5,307,669 to Etsuro Nishio (Nishio).

Regarding Claims 5, 6, 7 and 8, Stauffers modified by McDaniel discloses an apparatus having a gasket and seal jig for use with a leakage testing apparatus, which has a pressure-contact surface for an article being tested (Stauffer, figure 1), but does not explicitly disclose a seal ring and accompanying groove or a resin stopper. \

Nishio discloses A seal ring for use with a leakage testing apparatus, which comprises a seal member strip cut from the seal and having opposite ends thereof bonded together in the form of a ring in an attitude such that said major axis is oriented in the direction in which a compressive force is exerted (Nishio, ring 17).

Nishio further discloses that said pressure-contact surface having formed therein a ring-shaped recessed groove in which the seal ring for a leakage testing apparatus set forth in claim 5 is mounted such that its major axis is oriented in the direction of the depth of said recessed groove and that one of said minor sides projects out of said recessed groove, the height of that portion of the seal ring projecting out of said recessed groove being set at a height sufficient that a gap remains between the article being tested and the seal jig when the peripheral portion of the opening of the article being tested is brought into pressure-contact with the projecting portion of the seal ring and compresses the seal ring in such a direction as to force it into the recessed groove until a desired seal thrust is reached (Nishio, figure 3, Stauffer figure 1).

Nishi also discloses a plurality of stoppers are mounted on said pressure-contact surface, the height of said stoppers being set to be lower than the height of that portion of the seal ring projecting out of said recessed groove, the arrangement being such that the peripheral portion of the opening of the article being tested is brought into pressure-

contact with the projecting portion of the seal ring and compressively deforms the seal ring in the direction of said major axis until said peripheral portion comes into abutment with said stoppers (Stauffer, figure 7, stop 91) and that said stoppers are formed of a low thermal conductivity resin. Pressure testing device such as the one Stauffer illustrates are commonly made of plastic, which encompasses resin. The stops are inherently made of resin, as Stauffer's tool is inherently made of resin, as demonstrated by Nisio's device, which is made of a plastic resin (Nisio, column 3, lines 7-12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Stauffer modified by McDaniels with teachings from Nishio because Nishio allows for the diminution of errors caused by small imperfections of the seal of the testing jig (Nishio, column 1, lines 61-66).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5,042,289 to Eric Jensen discloses a container tester using a gasket. US Patent 4,202,201 to Andrew Johnson shows a gasket system having rounded corners. US Patent Application Publication 2002/0038569 to Yoshio Iwasaki discloses a gasket integrity tester. US Patent 4,268,945 to William Van Arman et al. discloses a sealing system and tester. US Patent Application Publication 2004/0016290 to Daniel Poblete regards a seal integrity tester having a rectangular shape and rounded edges and a gasket.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gunnar J. Gissel whose telephone number is (571)270-3411. The examiner can normally be reached on Mon-Fri, 7:30AM-5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571)272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GJG/

3/13/2008
/Hezron Williams/
Supervisory Patent Examiner, Art Unit 2856